## ABSTRACT OF THE DISCLOSURE

A surface plasmon sensor includes a plurality of light supply devices for irradiating a beam, a plurality of surface plasmon resonance detection surfaces where the beam irradiated from the light supply means being incident to, a plurality of light detection devices for detecting the beam reflected at the surface plasmon resonance detection surface, a plurality of reflective surfaces provided at respective optical paths from the light supply devices to the light detection devices, the reflective surfaces being arranged opposing to the respective surface plasmon resonance detection surfaces, a wave formed multiwell formed with the surface plasmon resonance detection surfaces and the reflective surfaces, and the light detection devices positioned close to the light supply means.